Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1202txn

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS 1 Web Page for STN Seminar Schedule - N. America

NEWS 2 AUG 10 Time limit for inactive STN sessions doubles to 40 minutes

NEWS 3 AUG 18 COMPENDEX indexing changed for the Corporate Source (CS) field

NEWS 4 AUG 24 ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced

NEWS 5 AUG 24 CA/CAplus enhanced with legal status information for U.S. patents

NEWS 6 SEP 09 50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY

NEWS  $\,$  7 SEP 11 WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus

NEWS 8 OCT 21 Derwent World Patents Index Coverage of Indian and Taiwanese Content Expanded

NEWS 9 OCT 21 Derwent World Patents Index enhanced with human translated claims for Chinese Applications and Utility Models

NEWS 10 OCT 27 Free display of legal status information in CA/CAplus, USPATFULL, and USPAT2 in the month of November.

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4, AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN customer agreement. This agreement limits use to scientific research. Use for software development or design, implementation of commercial gateways, or use of CAS and STN data in the building of commercial products is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 14:11:44 ON 17 NOV 2009

=> file reg COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.22 0.22

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 14:11:57 ON 17 NOV 2009 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 NOV 2009 HIGHEST RN 1192409-16-7 DICTIONARY FILE UPDATES: 15 NOV 2009 HIGHEST RN 1192409-16-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

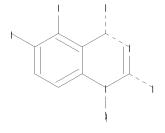
Please note that search-term pricing does apply when conducting  ${\tt SmartSELECT}$  searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\Stnexp\Queries\10572341a.str



chain nodes :
11 12
ring nodes :
1 2 3 4 5 6 7 8 9 10 13 14
ring/chain nodes :
15
chain bonds :
7-11 9-15 10-12
ring bonds :
1-2 1-6 1-13 2-3 2-7 3-4 3-10 4-5 5-6 6-14 7-8 8-9 9-10
exact/norm bonds :
1-13 2-7 3-10 6-14 7-8 7-11 8-9 9-10 9-15 10-12
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:Atom 13:Atom 14:Atom 15:CLASS

## L1 STRUCTURE UPLOADED

=> d L1 L1 HAS NO ANSWERS L1 STR

Structure attributes must be viewed using STN Express query preparation.

= >

Uploading C:\Program Files\Stnexp\Queries\10572341b.str

chain nodes :

11 12

ring nodes :

1 2 3 4 5 6 7 8 9 10 14 15

ring/chain nodes :

13

chain bonds :

7-11 9-13 10-12

ring bonds :

1-2 1-6 2-3 2-7 3-4 3-10 4-5 4-14 5-6 5-15 7-8 8-9 9-10

exact/norm bonds :

 $2-7 \quad 3-10 \quad 4-14 \quad 5-15 \quad 7-8 \quad 7-11 \quad 8-9 \quad 9-10 \quad 9-13 \quad 10-12$ 

normalized bonds :

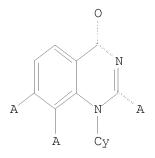
1-2 1-6 2-3 3-4 4-5 5-6

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:Atom 13:CLASS 14:Atom 15:Atom

## L2 STRUCTURE UPLOADED

L2 HAS NO ANSWERS L2 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11 full

FULL SEARCH INITIATED 14:13:55 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1882193 TO ITERATE

100.0% PROCESSED 1882193 ITERATIONS SEARCH TIME: 00.00.16

6 ANSWERS

bhitten iiim. oo.oo.io

L3 6 SEA SSS FUL L1

=> s 12 full

FULL SEARCH INITIATED 14:14:27 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1882193 TO ITERATE

100.0% PROCESSED 1882193 ITERATIONS SEARCH TIME: 00.00.13

0 ANSWERS

L4 0 SEA SSS FUL L2

=> file caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
373.20 373.42

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 14:14:55 ON 17 NOV 2009 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 17 Nov 2009 VOL 151 ISS 21 FILE LAST UPDATED: 16 Nov 2009 (20091116/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

During November, try the new LSUS format of legal status information in the CA/CAplus family databases for free! Complete details on the number of free displays and other databases participating in this offer appear in NEWS 10.

=> d his

(FILE 'HOME' ENTERED AT 14:11:44 ON 17 NOV 2009)

FILE 'REGISTRY' ENTERED AT 14:11:57 ON 17 NOV 2009

L1 STRUCTURE UPLOADED

L2 STRUCTURE UPLOADED

L3 6 S L1 FULL L4 0 S L2 FULL

FILE 'CAPLUS' ENTERED AT 14:14:55 ON 17 NOV 2009

=> s 13

L5 1 L3

=> d L5 ibib abs hitstr

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:572704 CAPLUS

DOCUMENT NUMBER: 129:312244

ORIGINAL REFERENCE NO.: 129:63632h,63633a

TITLE: Benzoquinazoline Derivatives as Substitutes for

Thymine in Nucleic Acid Complexes. Use of Fluorescence Emission of Benzo[g]quinazoline-2,4-(1H,3H)-dione in

Probing Duplex and Triplex Formation

AUTHOR(S): Godde, Frederic; Toulme, Jean-Jacques; Moreau, Serge

CORPORATE SOURCE: IFR Pathologies Infectieuses, Universite Victor

Segalen, Bordeaux, 33076, Fr.

SOURCE: Biochemistry (1998), 37(39), 13765-13775

CODEN: BICHAW; ISSN: 0006-2960

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 129:312244

AB Triple helix formation obeys structural features that do not allow accommodation of every double-stranded sequence; it requires the occurrence of homopurine stretches. A further constraint comes from the weak energy of interaction between the third strand and the double-stranded target. In an attempt to design bases leading to increased stability of triplexes, we explored the ability of modified bases with an extended aromatic domain to increase third strand binding through stacking interactions. We report here the use of benzo[g]- and benzo[f]quinazoline-2,4-dione-(1H,3H)-dione as substitutes for thymine in

the canonical TA\*T triplet. The synthesis and characterization of the  $\beta$  nucleoside derivs. of benzoquinazolines are described.

Triplex-forming oligonucleotides containing these modified bases have been prepared, and their ability to form triplexes has been evaluated by UV absorption-monitored thermal denaturation measurements.

Benzo[g]quinazoline and benzo[f]quinazoline formed triple-stranded structures with slightly decreased stabilities. In addition, benzo[g]quinazoline revealed strong fluorescence emission properties which can be used to monitor selectively the formation of triple-helical structures. Annealing of benzo[g]quinazoline to complementary strands did not produce any fluorescence modification. But when it was introduced into the Hoogsteen strand of PyPu\*Py complexes, the fluorescence intensity was reduced and the emission maximum was shifted to short wavelengths.

IT 214492-91-8P

RL: BYP (Byproduct); PREP (Preparation)

(preparation of benzoquinazoline derivs. as substitutes for thymine in nucleic acid complexes for probing duplex and triplex formation)

RN 214492-91-8 CAPLUS

CN Benzo[f]quinazoline-1,3(2H,4H)-dione,

4-[5-0-[bis(4-methoxyphenyl)phenylmethyl]-2-deoxy- $\alpha$ -D-erythropentofuranosyl]- (CA INDEX NAME)

Absolute stereochemistry.

IT 214492-85-0P 214492-87-2P 214492-89-4P 214492-95-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of benzoquinazoline derivs. as substitutes for thymine in nucleic acid complexes for probing duplex and triplex formation)

RN 214492-85-0 CAPLUS

CN Benzo[f]quinazoline-1,3(2H,4H)-dione, 4-[2-deoxy-3,5-bis-O-(4-methylbenzoyl)-D-erythro-pentofuranosyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 214492-87-2 CAPLUS

CN Benzo[f]quinazoline-1,3(2H,4H)-dione, 4-(2-deoxy-D-erythro-pentofuranosyl)- (CA INDEX NAME)

Absolute stereochemistry.

RN 214492-89-4 CAPLUS

CN Benzo[f]quinazoline-1,3(2H,4H)-dione,  $\begin{array}{lll} 4-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-2-deoxy-\beta-D-erythropentofuranosyl]- & (CA INDEX NAME) \end{array}$ 

Absolute stereochemistry.

RN 214492-95-2 CAPLUS

INDEX NAME)

Absolute stereochemistry.

ΙT 214492-93-0P

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of benzoquinazoline derivs. as substitutes for thymine in nucleic acid complexes for probing duplex and triplex formation)

214492-93-0 CAPLUS RN

Benzo[f]quinazoline-1,3(2H,4H)-dione, CN

 $4-(2-\text{deoxy}-\beta-D-\text{erythro-pentofuranosyl})-$  (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: THERE ARE 38 CAPLUS RECORDS THAT CITE THIS 38

RECORD (39 CITINGS)

REFERENCE COUNT: THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS 43

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 14:11:44 ON 17 NOV 2009)

FILE 'REGISTRY' ENTERED AT 14:11:57 ON 17 NOV 2009

L1STRUCTURE UPLOADED

STRUCTURE UPLOADED L2

L3 6 S L1 FULL L40 S L2 FULL

FILE 'CAPLUS' ENTERED AT 14:14:55 ON 17 NOV 2009

L5 1 S L3

=> log y COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

XXXXXXXXXXXXXXXX

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL SESSION ENTRY CA SUBSCRIBER PRICE -0.82 -0.82

STN INTERNATIONAL LOGOFF AT 14:15:26 ON 17 NOV 2009